

ON THE GENUS *DODONÆA*.

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According to Baron F. von Mueller's Census, 43 species of *Dodonæa* have been described as Australian, and these are distributed in various proportions throughout the Australian colonies, two only (*D. ericifolia* and *D. viscosa*) extending to Tasmania, whilst N. S. Wales has nineteen. Mr. Bentham seems to have felt some difficulty in arranging the species as they are deficient in many instances of any positive characters, even "the form of the wings" on the capsule (on which much reliance had been placed) being as variable as the leaves. Baron Mueller, in his *Victorian Plants*, p. 86, expresses himself very doubtfully respecting some of the so-called species, which he would regard as varieties of *D. viscosa* (Linn.). Amongst these is a plant, of which I collected specimens more than twenty years ago on the banks of the Parramatta River, and of which he remarked that "it exhibited on the same branchlets simple and pinnate leaves, and their intermediate forms." It is worthy of record that though several intelligent collectors have searched for this shrub, or one similar to it, they have not been successful; and therefore I am inclined to think that the opinion expressed by Baron Mueller is correct. A plant of a similar character was found on the Hastings River by the late Dr. Beckler, and that the Baron designated var. *megazyga* of *D. viscosa*; but Mr. Bentham, as may be seen by referring to Vol. I. of the *Flora Australiensis*, p. 483, has raised these forms to the dignity of a species. Whether a true species or not, it is certain that some of the *Dodonæas* have simple and pinnate leaves on the same branches, as may be seen in the specimen of *D. attenuata* (A. Cunn.), from the Murrumbidgee. Mr. Bentham remarks that some forms of this species almost pass into *D. lobulata* (F.v.M.); but in the specimen now under consideration, the leaves are rather pinnate than pinnatifid, and they

are differently arranged, whilst the former shrub is smaller and more diffuse in habit. Mr. J. E. Brown's figures of the Forest Flora of S. Australia, are very useful in illustrating *D. lobulata* (F.v.M.), *D. microzyga* (F.v.M), and *D. viscosa* (Linn.), which he calls the lobe-leaved "Hop," the small-leaved "Hop," and the Native "Hop," the second only being limited to S. Australia. The species of *Dodonæa* have acquired the name of "Hops," from the resemblance which their fruits bear to those of the true hop, *Humulus lupulus*; and it is a curious fact, that, although in the systematic classification of plants *Humulus* of the *Cannabinaceæ* and *Dodonæa* of the *Sapinduceæ* are not allied to each other, yet the fruit of the latter is used in the interior in raising yeast for bread making. Some years since I ascertained this on the Castle-reagh, and I am told that it is still used on some of the remote stations for the same purpose. The smaller species of *Dodonæa* are much relished by sheep, and in dry seasons are a valuable addition to the native forage, the larger shrubs being cut down for that purpose.